

This listing will replace all prior versions, and listings, of claims in the Application:

IN THE CLAIMS:

1. (Currently Amended) A multi-catalyst injection system comprising:
a vessel ~~suitable for storing fluid cracking catalyst~~ configured to deliver catalyst to a fluid catalytic cracking unit;
a separator disposed in the vessel and defining at least two compartments within the vessel;
a plenum defined in the vessel and fluidly coupled to each compartments, wherein the plenum is pressurizable; and
a plurality of dispense mechanisms, a respective one of each dispense mechanisms coupled to a respective compartment.
2. (Original) The system of claim 1, wherein the separator extends from a bottom of the vessel to an elevation short of a top of the vessel.
3. (Original) The system of claim 2, wherein the separator is substantially planar.
4. (Original) The system of claim 2, wherein the separator comprises:
two or more flanges extending radially outward from a common joint, the two or more flanges forming an angle therebetween that is less than approximately 180 degrees.
5. (Original) The system of claim 4, wherein at least one of the two or more flanges is rotatable around the common joint.
6. (Original) The system of claim 1, wherein the at least two of the compartments have different volumes.

7. (Original) The system of claim 1, wherein the at least two compartments are substantially equal in volume.
8. (Original) The system of claim 1, wherein at least one of the compartments has an adjustable volume.
9. (Original) The system of claim 1 further comprising:
a plurality of catalyst fill ports disposed through a top of the vessel, wherein the plenum is positioned proximate the fill ports.
10. (Currently Amended) A fluid catalytic cracking system comprising:
a fluid catalytic cracking unit; and
a catalyst injection vessel coupled to the fluid catalytic cracking unit, the vessel having a plurality of catalyst storage compartments chambers; and
a separator coupled to a bottom of the vessel and extending to an elevation short of a top of the vessel.
11. (Cancelled)
12. (Currently Amended) The system of ~~claim 44~~ claim 10, wherein the separator comprises:
two or more flanges extending radially outward from a common joint, at least two of the flanges forming a dog-leg orientation.
13. (Currently Amended) The system of ~~claim 44~~ claim 10, wherein the separator comprises:
two or more flanges extending radially outward from a common joint, at least two of the flanges rotatable around the common joint.
14. (Currently Amended) The system of claim 10, wherein ~~the~~ at least two of the catalyst storage compartments have different volumes.

15. (Currently Amended) The system of claim 10, wherein the at least two of the catalyst storage compartments are substantially equal in volume.
16. (Currently Amended) The system of claim 10 further comprising:
a plurality of catalyst fill ports disposed through a top of the vessel; and
a plenum is positioned within the vessel proximate the fill ports and fluidly coupled to the catalyst storage compartments.
17. (Original) The system of claim 10 further comprising:
a pressurizing system coupled to the vessel adapted to control the pressure within the vessel in a range of about 5 to about 80 pounds per square inch (about 0.35 to about 5.6 kg/cm²).
18. (Currently Amended) The system of claim 10 further comprising:
a respective metering device coupled to each catalyst storage compartment.
19. (Currently Amended) A fluid catalytic cracking system ~~The system of claim 10~~ further comprising:
a fluid catalytic cracking unit;
a catalyst injection vessel coupled to the fluid catalytic cracking unit, the vessel having a plurality of catalyst storage compartment;
a separator coupled between a bottom and a top of the vessel; and
at least one hole extending through the separator proximate the top of the vessel.
20. (Currently Amended) The system of claim 10, wherein at least one of the catalyst storage compartments has an adjustable volume.
21. (Currently Amended) A method for injecting catalyst into a fluid catalytic cracking unit, comprising:

storing catalyst in a first compartment of a vessel;
storing catalyst in a second compartment of the vessel, wherein the catalyst stored in the first and second compartments are chemically different; and
dispensing catalyst from the first compartment into a fluid catalytic cracking.

22. (Original) The method of claim 21 further comprising:
adjusting a volume of at least one of the compartments.
23. (Original) The method of claim 21 further comprising:
dispensing catalyst from the second compartment into the fluid catalytic cracking unit.
24. (Original) The method of claim 23, wherein the step of dispensing catalyst from the first and second compartments occurs simultaneously.
25. (Original) The method of claim 23, wherein the step of dispensing catalyst from the first and second compartments occurs sequentially.
26. (Cancelled)
27. (Previously presented) The system of claim 1, wherein the vessel is closed.
28. (Previously presented) The system of claim 1, wherein the vessel further comprises:
a pressure vessel.
29. (Cancelled)
30. (Previously presented) The system of claim 10, wherein the catalyst injection vessel is closed.

31. (Previously presented) The system of claim 10, wherein the catalyst injection vessel further comprises:

a pressure vessel.

32. (Previously presented) The system of claim 10, wherein the compartments of the catalyst injection vessel are pressurizable.

33. (Previously presented) The method of claim 21, wherein dispensing further comprising:

pressurizing a plenum above and fluidly communicating with the first and second compartments.